

Red Lake Labs



Model K1004E

HYCAM (400-ft)

16-mm high-speed motion-picture camera

Features include:

- *All the basic advantages of the Hycam concept (See Red Lake Form HY-164)*

plus

- *400-ft film capacity*
- *Special adapters to minimize film chipping with 100-ft and 200-ft film spools*

- *Integral electronic control (scr), which gives film speeds flat to within 1 per cent (See curves, page 2)*
- *Multiple run capability up to 3000 pictures per second*
- *External film-footage indicator to facilitate multiple runs*
- *Optical heads interchangeable between 100-ft. and 400-ft Hycam models*

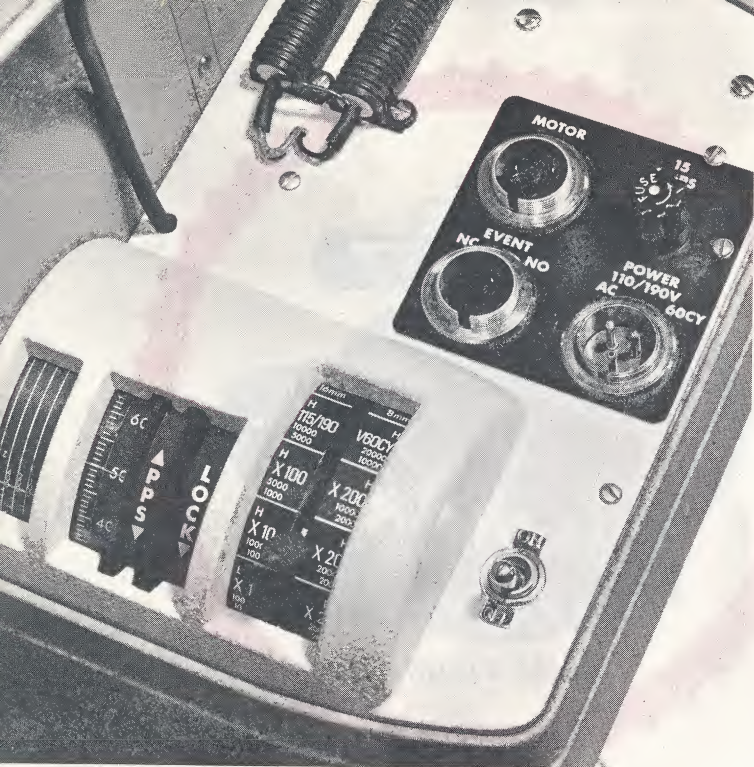
With the introduction of the 400-ft Hycam Camera, Red Lake Labs has not only added tremendous mechanical flexibility to the Hycam line, but has also provided electronic speed regulation to 1 per cent. This facilitates data reduction.

Hycam flexibility now permits the user mechanically to switch optical heads from 100-ft to 400-ft film-transport units with the simple release of three screws. To attain electronic speed regulation, the 100-ft head requires installation of the speed sensor. With the newly developed built-in electronic speed control, the speed curves are flat after acceleration. (See curves, page 2) This control regulates up to picture rates of 5000 (10,000 with $\frac{1}{2}$ -frame or 8-mm head). Above this, an external autotransformer is used.

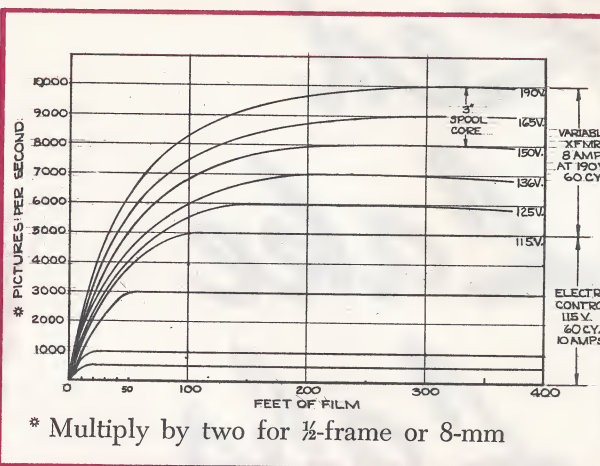
Aside from film capacity, the inclusion of the film-footage indicator, and the built-in electronic speed control, the new 400-ft Hycam transport unit contains all the remarkable features of the earlier 100-ft Hycam Camera: such as,

- A single motor for the entire speed range 10 to 20,000 pps
- A smooth-start centrifugal clutch that does away with the need for expensive heavy external voltage-control devices.
- Fingertip film-spool ejectors
- A film compartment designed to minimize film chipping at the end of a run
- For the 400-ft model, adapters are available to permit the running of 100-ft and 200-ft film reels

more



SPEED CURVES (MODEL K1004E)



Speed-control and operating console built into Hycam base permits continuously variable fingertip control within 1 per cent of framing rates up to 5000 pps. Lock is provided to insure stability of setting during camera run

HYCAM MODEL K1004E (Continued)

- An event synchronizer and end-of-film cutoff switch built in
- Direct through-the-lens viewing and focusing facilities with dark slide and external shutter positioner.

The famous Hycam optical head* has

- Interchangeable rotating prisms to give $\frac{1}{2}$ -frame 16-mm or true 8-mm pictures
- A flat film gate for uniform resolution
- Interchangeable shutters permitting exposures as short as 1 microsec with full- or $\frac{1}{2}$ -frame 16-mm, or 0.5 microsec with 8-mm
- Convenient mounting for all C-mount lenses
- The ability to install special aperture masks for fiducial markers
- Double timing lights
- A single shaft carrying the segmented shutter, the film sprocket, and the rotating prism. This eliminates gearing with its backlash problems

*(for Details see Red Lake Form HY-164)

ORDERING INFORMATION

- Model K1004E** Hycam High-Speed Motion-Picture Camera, 16-mm x 400-ft, with electronic speed control, with framing rate variable from 100 to 10,000 pps
- Model K10S4E** Hycam High-Speed Motion-Picture Camera, 16-mm x 400-ft, with electronic speed control, with low-speed transmission to give framing rates variable, 10 to 10,000 pps
- Model K1004AE** Hycam High-Speed Motion-Picture Camera, 16-mm x 400-ft, with electronic speed control, with 16-sided prism for $\frac{1}{2}$ -frame 16-mm or true 8-mm at framing rates variable 200 to 20,000 pps
- Model K10S4AE** Hycam High-Speed Motion-Picture Camera, 16-mm x 400-ft, with electronic speed control, with 16-sided prism for $\frac{1}{2}$ -frame 16-mm or true 8-mm with low-speed transmission to give framing rates variable from 20 to 20,000 pps

2971 CORVIN DRIVE

SANTA CLARA, CALIFORNIA

(408) 739-1698

Red Lake Labs

PHOTO INSTRUMENTATION EQUIPMENT

Products the User Likes